**NICARAGUA**



**BASIC COUNTRY DATA**

Total Population: 5,788,163

Population 0-14 years: 34%

Rural population: 43%

Population living under USD 1.25 a day: 15.8%

Population living under the national poverty line: no data

Income status: Lower middle income economy

Ranking:Medium human development (ranking 129)

Per capita total expenditure on health at average exchange rate (US dollar): 105

Life expectancy at birth (years): 73

Healthy life expectancy at birth (years): 61

**BACKGROUND INFORMATION**

Leishmaniasis was described in Nicaragua for the first time in 1917. Four clinical forms are present in the country: conventional CL, MCL, atypical CL, and VL [1]. CL is widespread in the central highlands and the Atlantic lowland plains and it is caused by *L.braziliensis* and *L.panamensis* [2], although a hybrid of both species has been characterized in almost one third of the cases in the north of the country [3].

Like in other countries in central America, atypical non-ulcerative CL caused by *L.infantum* is present, more specifically in the Pacific region, and may or may not be caused by previous VL [2,4]. It has been suggested that these cases, with atypical CL, could be a potential reservoir for *L.infantum*, and should be targeted in the control program [4].

CL incidence is approximately 3.8/100,000 inhabitants, which makes this the country with the highest number of CL and MCL cases in Central America.

VL was first reported in 1994 [5].

**PARASITOLOGICAL INFORMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Leishmania* species** | **Clinical form**  | **Vector species** | **Reservoirs** |
| *L. infantum* | ZVL, CL | *Lu. longipalpis, Lu. evansi* | *Canis familiaris* |
| *L. panamensis* | ZCL | *Lu. trapidoi, Lu. ylephiletor,**Lu. cruciata, Lu. panamensis*  | unknown |
| *L. braziliensis* | ZCL, MCL | *Lu. panamensis* | unknown |

**MAPS AND TRENDS**

**Visceral leishmaniasis**

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**Cutaneous leishmaniasis**

****

**Cutaneous leishmaniasis trend**

**Number of cutaneous and mucocutaneous leishmaniasis cases**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2008** | **2009** | **2010** |
| CL cases | 5941 | 4110 | 3570 |
| MCL cases | 34 | 30 | 31 |
| MCL % of CL cases | 5.6 | 7.2 | 8.6 |

**Visceral leishmaniasis cases**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
| 5 | 5 | 1 | 1 | 1 | 4 | 1 | 1 |

**CONTROL**

Leishmaniasis has been a notifiable disease since 1980. A leishmaniasis control program was established in 1994. The vector-control strategy adopted relies on controlling foci (spatial spraying in a 500 m radius, using a portable motorized sprayer) and using treated bednets. There is under-reporting of the disease and a lack of systematic monitoring of patients and focused vector-control measures.

**DIAGNOSIS, TREATMENT**

**Diagnosis:**

CL: microscopic examination of skin lesion sample, Montenegro skin test, IFAT, PCR.

VL: IFAT, PCR.

**Treatment:**

CL: antimonials.

VL: antimonials.

**ACCESS TO CARE**

The Ministry of Health provides 95% coverage and is assisted by two NGO’s, that help carry out some activities, such as staff training, drug procurement and medical consultations, etc.

**ACCESS TO DRUGS**

Glucantime (Sanofi) is registered.

**SOURCES OF INFORMATION**

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